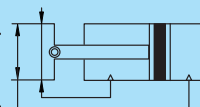


DOUBLE ACTING TYPE **DSV2**

SINGLE ACTING TYPE **DSV2S**





Features

- Available with comprehensive range of bore sizes 10 ~ 25mm.
- Magnetic as standard.

Specification

Type	DSV2	DSV2S
Bore	Φ 10、16、20、25	
Power fluid	Filtered air with or without lubrication	
The range of pressure	Double acting type	1.0 ~ 6.1 kgf/cm ²
	Single acting type	2.5 ~ 6.1 kgf/cm ²
The range of temperature	-10 ~ +60 °C (No freezing)	
Max frequency	180 cycles / min	
Clamp / release angle	-10° ~ 30°	

How to order

DSV2	20	-	DTH-F9N	1
Type	Bore		Sensor switch	Quantity
 DSV2	10 : Φ 10 16 : Φ 16 20 : Φ 20 25 : Φ 25		<div>DTH-F9B Two wire type No reed switch</div> <div>DTH-F9N Three wire type NPN Current sinking</div> <div>DTH-F9P Three wire type PNP Current sourcing</div> <div>DTD11046 Fixing frame</div>	1 : 1pc 2 : 2pcs
 DSV2S			<div>DTH-F9BV Two wire type No reed switch</div> <div>DTH-F9NV Three wire type NPN Current sinking</div> <div>DTH-F9PV Three wire type PNP Current sourcing</div>	

Clamping force

Acting type	Bore	Clamping force N-m(kgf · cm)*	Weight g
Double acting type	DSV2-10	0.10 (1.0)	39
	DSV2-16	0.39 (4.0)	91
	DSV2-20	0.70 (7.1)	180
	DSV2-25	1.36 (13.9)	311
Single acting type	DSV2S-10	0.070 (0.7)	39
	DSV2S-16	0.31 (3.2)	92
	DSV2S-20	0.54 (5.5)	183
	DSV2S-25	1.08 (11.0)	316

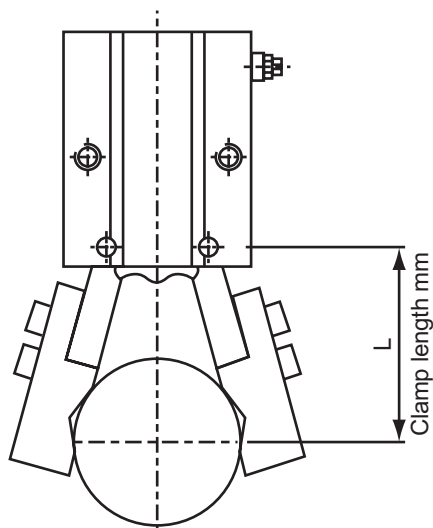
* When pressure 0.5MPa (5.1kgf/cm²).

* Please refer [Clamping force] table, starting choose the suitable clamping point.

* Weight does not include sensor switch.

Clamping point

● Please refer to the following diagram, choose the suitable clamping point.



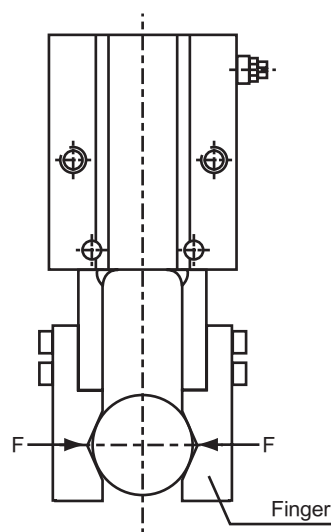
● Selection specification (refer to the work piece weight)

See the different of the accessories and parts which friction coefficient and shape, please select one model that can be 10 to 20 times clamping force.

It must be greater clamping force when the work piece was taken that would have acceleration and hammering action.

● Clamping force

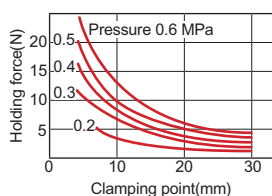
When the Clamping force as shown in below diagram, two grippers and accessories all contact work piece and we using F to represent trust of one gripper.



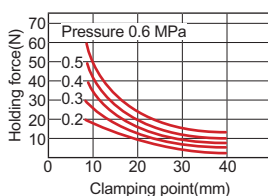
Clamping force

● Double acting type

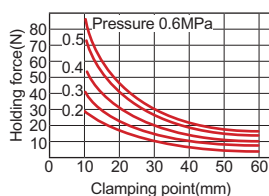
DSV2-10



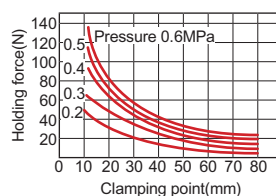
DSV2-16



DSV2-20

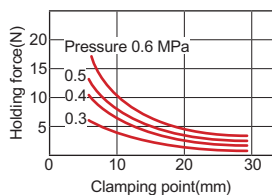


DSV2-25

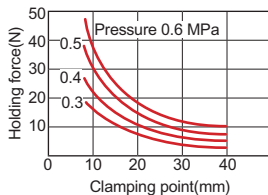


● Single acting type

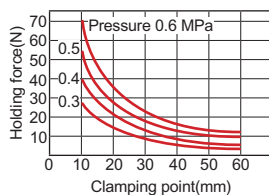
DSV2S-10



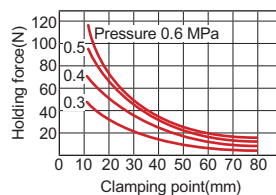
DSV2S-16



DSV2S-20

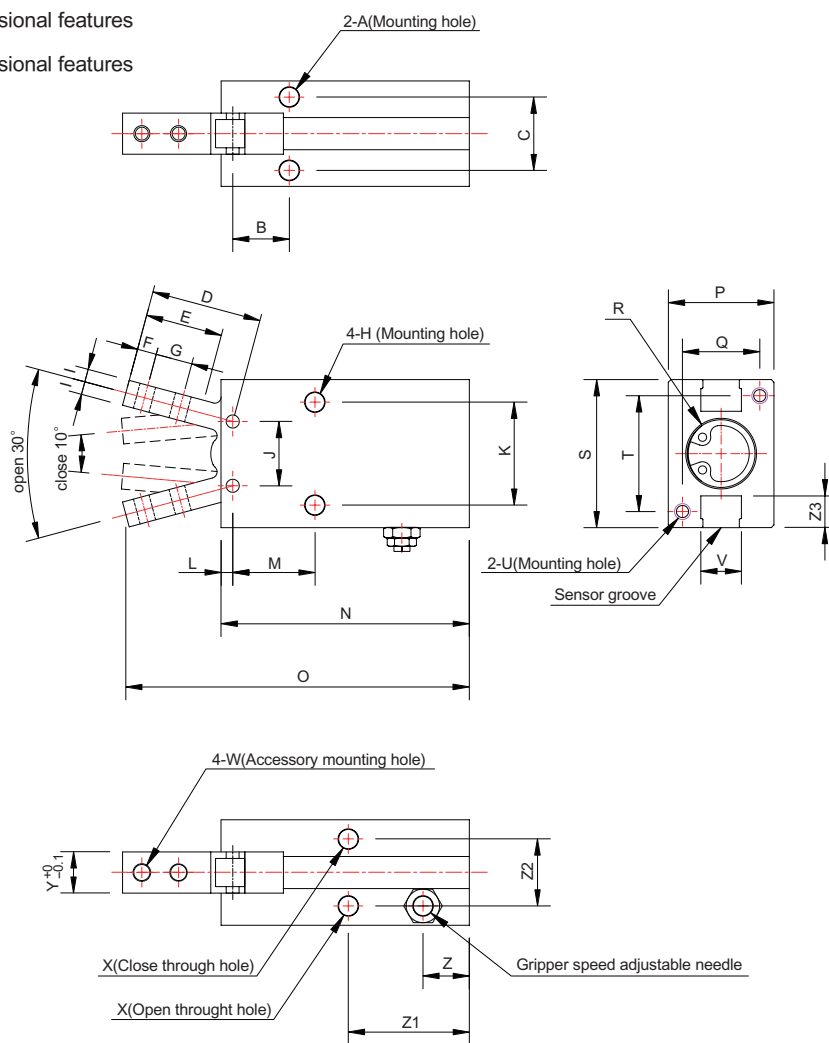


DSV2S-25



DSV2 Dimensional features

DSV2S Dimensional features



* Through hole side become exhaust when single action.

* Using square sensor groove can not install on through hole.

Dimensional table

Mark Bore	A	B	C	27D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Φ 10	M3x0.5 deep 6	8.8	11.4	17.2	12	3	5.7	M3x0.5 deep 5 hole Φ 2.6	2	10	16	2.8	12.8	38.6	(52.4)	16.4	12	Φ 11H9 ^{+0.043} deep 1.6
Φ 16	M4x0.7 deep 6.5	10.7	16	22.6	17	4	7	M4x0.7 deep 8 hole Φ 3.3	3.5	16	24	3.9	16.2	44.6	(62.5)	23.6	15	Φ 17H9 ^{+0.043} deep 1.3
Φ 20	M5x0.8 deep 10	15.7	18.6	28	20	5.2	9	M5x0.8 deep 10 hole Φ 4.2	4	—	30	4.5	21.7	55.2	(77.8)	27.6	18	Φ 21H9 ^{+0.052} deep 1.7
Φ 25	M6x1 deep 10	19.3	22	37.5	27	8	12	M6x1 deep 12 hole Φ 5	5	25	36	4.6	25.8	60.4	(92)	33.6	22	Φ 26H9 ^{+0.052} deep 1.4

Mark Bore	S	T	U	V	W	X	Y	Z	Z1	Z2	Z3
Φ 10	23	18	M3X0.5 deep 6	6.3	M2.5X0.45	M3X0.5	6.4 _{-0.1} ⁰	7.2	18.8	10.4	—
Φ 16	30.6	22	M4x0.7 deep 8	6.3	M3x0.5	M5x0.8	8 _{-0.1} ⁰	7	18.5	13	5.8
Φ 20	42	32±0.1	M5x0.8 deep 10	6.3	M4x0.7	M5x0.8	10 _{-0.1} ⁰	7.5	22.2	14	9
Φ 25	52	40	M6x1 deep 12	6.3	M5x08	M5x0.8	12 _{-0.1} ⁰	7.7	23.5	20	11.5